eMetric

Information Technology Coordinator Training Session

Amy Schaefer – Project Manager Nathan Wall – Project Manager

Travis Radicke & Ryan Rasti – IT Support support@emetric.net

Trystan Hopkins & Marissa Hurley – Support support@emetric.net

- Introductions
- Timelines
- High Level Overview of iTester 3
- Overview of System Architecture & Requirements
- Installation Process
- Workstation Readiness Process
- Q&A

Technology Coordinator Timeline:

DATE EVENT			
August 20	iTester 3 is available for use by students.		
August 31	Last day that iTester 2 is available for use by students.		
September 4 through 14	Pre-test testing window for South Dakota Benchmarks.		

start of iTester install and testing:

- •Installation of iTester Client and performance of Site Setup and Workstation Readiness tasks.
- •Note: Teachers and students will not be able to complete a test until the Client has been installed at their facility!

Two main components of the online testing engine:

- Test Administration System (iTester[™] Admin).
- Student Test Delivery System (iTester[™] Client).

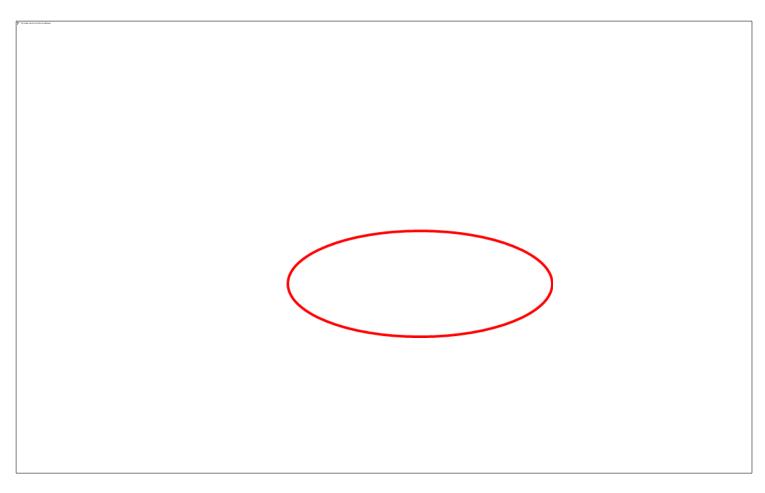
Why a new version?

- Allows for some updates to functionality without always having to reinstall the client.
- Java is no longer required.
- Support for mobile devices.
- Support for Technology Enhanced Items.

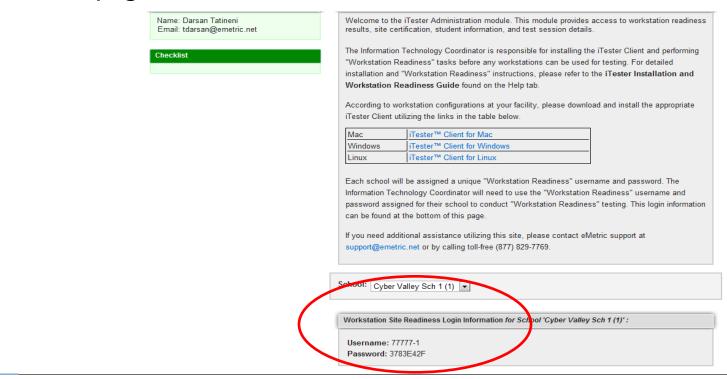
iTester Admin

- Accessible within the South Dakota Assessment Portal (<u>sdap.emetric.net</u>).
- Browser interface for state, district, and school personnel to manage students, student groups, etc.
- For IT Coordinators:
 - From here you can download the iTester Client install.
 - Perform workstation readiness tests (WSRs).

 The iTester Client can be downloaded from the iTester homepage.



- To perform your WSR, you'll need special login information.
- Additional information for WSRs can be found in the help guide section.



Portal and Web applications

	Browsers	
Windows	Firefox 3.6+ Internet Explorer 7.0+ Google Chrome 10.0+	
Mac	Safari 4.0 + Firefox 3.6+ Google Chrome 10.0+	
Linux	Firefox 3.6+ Google Chrome 10.0+	
iOS	Mobile Safari iOS 5.0+	
Android	Android Browser 4.0+	

Student Workstation Component (Desktop Kiosk Mode)

	Windows	Mac	Linux
Operating system	Windows XP SP2+ Windows Vista Windows 7	Mac OS X 10.5.6 or later	Ubuntu 10.04+ Debian 6+ OpenSuSE 11.3+ Fedora Linux 14
Processor	Intel Pentium 4 or later	Intel	Intel Pentium 3 or later
Free disk space	200 MB		
RAM	512 MB		
Screen Resolution	1024 X 768		

System Requirements

Student Workstation Component (Browser Mode)

	Chrome	Firefox	Internet Explorer
Any Operating system	Chrome 12 or later	Firefox 10 or later Coming soon	IE 9 or later Coming soon

Student Workstation Component (Tablets)

- iPad with iOS 5.0 or later
 - With internet connection
- Plans for Windows 8 and Android in the near future

Note: Chromebooks running Google Chrome OS will also be supported for Browser mode only. Chrome OS automatically updates to the latest version.

iTester Client

- Web-based application downloaded to each testing workstation or the network.
 - Desktop application that operates independently of an internet browser.
 - Needs internet to communicate with the eMetric iTester server using web technologies. The communication is via HTTP and HTTPS.
 - Internet connectivity is only required to download the test content and submit responses for scoring. If there is no internet available when the student's answers are submitted, the Client will store those answers (encrypted) until it is re-launched when internet connectivity is restored.

Heartbeat (Stored Response Files)

- Triggered to periodically save and protect student responses.
- Internet interruption during testing:
 - An encrypted response file is saved in the location indicated during installation.
 - The encrypted response file will be updated periodically and automatically sent to the server once internet is available.
- Internet interruption at the end of testing:
 - A file with a name similar to "iTesterSync_ AD849G-DA56-19F3-73K39823DJS3" will be created and saved in the location indicated during installation. This file will contain the student's encrypted response. The student will be able to complete testing, but a screen will appear indicating they should notify their proctor.

Event monitoring (Log Files)

- Captures all events/actions that occur during testing.
 - Stored in the location indicated during installation.

iTester Client Security

- Test Security
 - Content:
 - Encrypted test content using AES
 - Remains encrypted during transmission from the web server to the Client on the testing workstation
 - Downloaded and decrypted upon student login
 - Decrypted content is stored in memory and will expire immediately after a student exits the client
 - Student Data Security:
 - Uses industry standard 128-bit SSL encryption
 - Desktop security
 - Kiosk mode restricts students from accessing the computer desktop or any other applications during testing

Testing Environment:

- Firewalls
 - Allow two-way traffic through ports 80 and 443
- Proxy and content filter servers
 - White list https://sdap.emetric.net on ports 80 and 443
- Sandboxing applications (i.e. DeepFreeze)
 - While installing the Client, choose network folder location for storing log files and encrypted response files.
 - Make sure the configured storage folder and its contents are not deleted by these applications.
- Thin Clients
 - Ensure there is enough memory, CPU and bandwidth on the server to accommodate multiple student test sessions
 - Client requires a minimum of 40 MB per client session

If there is a **Known** network outage

- Check for stored response files as soon as possible.
 - If stored response files **DO** exist, once network connectivity is restored, you will need to login to the workstation with the same student credentials and launch the iTester Client. Student responses will then be sent to the server.
- In the case of prolonged outages, if stored response files exist, extract these from the user profile location and save them in a secure location which will NOT be deleted by sandboxing applications.
- No student should log back into the iTester Client until stored response files have been handled.

Network Permissions

 If a network location is selected for saving stored response files and log files, users will need to have appropriate read/write permissions to the specified network folder.

iTester Client Installation

- Individual workstation (Recommended)
 - Pros
 - No impact on LAN traffic during initial application launch.
 - Delivers a seamless experience
 - Cons
 - Time spent on application installation and configuration (potentially).
- Network install
 - Pros
 - Time spent on application installation and configuration.
 - Centralized location for application updates and configuration.
 - Cons
 - Downloading of the application from network folder to test taker's workstation could introduce single point of failure during application launch.
 - Initial application launch could be delayed depending on the LAN traffic and bandwidth.
 - Potential issues related to latency and intermittent network connectivity issues.

QUESTIONS?

- support@emetric.net
- **877-829-7769**